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GENESEE FARMER.

SATURDAY, NOVEMBER 25, 1837.

Brief Hints for December.

Domestic animals should always commence winter in good condition, and this should be preserved through till spring. To do this, never attempt to winter more than you have abundant means of providing for. All animals should be regularly fed, they should be kept warm and comfortable by sufficient shelter, should have a regular supply of water, and, sheep and cattle especially, should have a portion of roots constantly intermixed with their daily food.

Large troughs for feeding with hay, are preferable to racks, as they more effectually prevent waste.

Sheep, instead of being left out exposed to the weather all winter, should be properly protected by suitable sheds. If this were attended to, and they have a daily supply of roots with their hay, very few would ever be lost in wintering.

Oats, for horses, will afford much more nourishment when ground, than when left unground.

Ruta bagas are excellent winter food for horses, fed in moderate quantities, with hay, and a small quantity of oats.

All stables for cattle and horses, should be kept constantly ventilated, very clean and well littered with straw.

Straw, and poor hay, are readily eaten by cattle if it is salted by sprinkling brine over it; and it is still better if in addition to this, they are chopped previously.

It is a very suitable time during this month, to cart leached ashes on land which may need it. It is particularly valuable on wet meadows; a friend spread eight or ten loads on an acre on his meadow (which was occasionally overflowed by the large creek which passes near it) and the consequence was an increase of one half more grass, although it had previously produced yearly two or more tons of hay to the acre. This effect continued for several years. Chaptel says, "The action of buck-ashes [leached ashes from asheries] is most powerful upon *moist lands and meadows*, in which they not only facilitate the growth of useful plants, but if employed constantly for several years, they will free the soil from weeds."

IN THE GARDEN, if the ground continues open, manure may be spread and buried, vacant ground ridged or spaded, sticks for peas, beans, &c. preserved or made, trellises repaired, and vegetables securely covered.

Silliman's Journal.

This excellent work of which every American has reason to be proud, in its October number, is now before us, and rich in every subject connected with science and the arts. In laying a short summary of its contents before the readers of the Farmer, we are actuated by two reasons,—first to give a general view of its variety, and the nature of the articles contained in the work;—and secondly, by calling the attention of farmers, who are interested in the success of such a work, and take a pleasure in the discussion of such subjects as fill the pages of the Journal, we hope to induce some to become subscribers to a work which has done much to advance the cause of agriculture at home, and more to make American literature and science favorably known among learned men abroad, than any periodical this country has yet produced.

The first paper in the number, is an examination of the theory of a resisting medium, by Mr. Haskins of Buffalo. It is well known that from the earliest ages, a notion has prevailed that the universe was filled with a subtle imponderable fluid, termed ether, and that though infinitely less dense than our atmosphere, still it must offer some resistance to the motion of the planets, and consequently by retarding their motion, bring them nearer and nearer to the sun, and eventually precipitate them into its mass. Most modern philosophers have in some form recognized the existence of such a medium; and the discovery that the mean motion of the moon had received a trifle of acceleration in the course of one or two thousand years, was supposed to afford conclusive evidence that such a resisting medium existed. The genius and science of La Place, however, showed that such an acceleration was owing to the eccentricity of the earth's orbit, and precisely the effect that should result, when all the influences brought to bear on the moon, and the well known laws of planetary motion, were taken into account. Lately the doctrine of a resisting medium has been brought forward and urged with new arguments, derived from the fact that Encke's comet, which has been carefully observed for several revolutions, has increased its velocity by shortening its period of return, and consequently must be drawing nearer the sun. Much stress has been laid on this fact, and many theories and much speculation, has been the result. Philosophers have busied themselves in calculating the time when this globe will be precipitated into the sun in consequence of this resisting medium; and theologians have felt themselves authorised to use the most positive forms of expression in reference to that event. Unfortunately, however, the delay in the return of Halley's comet, beyond the time the most rigid and exact calculations had fixed, upset all these fine spun theories, and the great truth, that nothing determinate can be learned respecting a resisting medium, from the comets, has been confirmed by repeated observations of Bielas. All these opinions and theories, are passed in review by Mr. Haskins, and he thus states the conclusion which may fairly be deduced:

"The predictions, therefore, which have pointed at the destruction of the solar system, through the agency of a resisting medium, may well be discarded. Inequalities there certainly are, in the motions of the heavenly bodies; but all these are confined within narrow limits, and they constantly oscillate around a mean position. This ensures the stability and duration of the system. Many of them, indeed, extend through vast periods of time, for their accomplishment, but they are the necessary consequences of the ascertained laws of gravity, and can never exceed their known limits. They constitute, in the sublime language of Pontecoulant, 'immense pendulums of eternity, which beat the ages, as ours do the seconds!'"

Aritcle second, is a sketch of the early life and character of that man of genius, Benjamin Thompson, better known as Count Rumford, a title bestowed on him by the King of Bavaria. The object of the paper is to correct several mistakes made by former biographers, particularly Cuvier, and this is done conclusively. Count Rumford was born at Woburn, Mass., but was driven from his country when young, and spent the greater part of his *life* in Europe. Whatever the injuries he may have received from his countrymen, were, nothing can justify his appearing in arms against them during the revolution, and deeply did he in after life regret this unfortunate step. Count Rumford was not a learned man, but a man of common sense, and a philosophical and observing mind. His great strength lay not in making new discoveries in science, though even here he was not deficient, but in converting to practical uses the discoveries of others. He did more than almost any other man of the age to illustrate the nature of heat, and explain the methods of producing it the most economically, especially for domestic purposes. In 1796, he established two biennial prizes of about 60 guineas each, for the most important discoveries in light and heat, the one to be adjudged by the Royal Society of London, and the other by the American Academy of Arts and Sciences. Medals by the Royal Society have been awarded to Prof. Leslie, M. Malus, Sir H. Davy, Dr. Wells, Dr. Brewster, and M. Fresnel. Whether the American Academy has ever made any award we are not informed. Count Rumford was born 1753, and died at Paris 1814.

Article third, is on Chrystallography, by J. D. Dana of New Haven, and is a valuable exposition of the rules that regulate the drawing of chrystals.

Article fourth, is a series of Meteorological sketches, prepared, we presume, by that able observer, W. C. Redfield of New York. It embraces observations on a variety of subjects connected with atmospheric changes, such as atmospheric elevation, currents of the atmosphere, clouds and rain, hail, thunder storms, water spouts and whirlwinds, the trade winds, and circuitous character of of aerial currents, with land and sea breezes; constituting a mass of facts, valuable to every one interested in understanding the subjects treated. Meteorology is a subject with which every farmer has more or less to do; and by understanding the laws which govern the science, and being able to appreciate the signs in the heavens that indicate the coming weather, he not unfrequently is able to escape losses which might otherwise be certain and serious.

We pass over some articles of a scientific nature, as not of interest to the general reader, and come to the address of Dr. Lyell, before the Geological Society of London. After having encountered and triumphed over the opposition which any new science is generally sure to meet, geology has assumed a high rank among the natural sciences, as an exponent of the former situation of our earth, and furnishing the most unanswerable proofs of the authenticity of the Mosaic record of the creation. Considerable apprehension was entertained by well meaning men for a time, that the science would come in conflict with revelation; but these fears have been dispelled, and in geology is furnished a new proof that truths never clash, from whatever source they may be derived. One of the most striking facts yet brought to light from the study of geology has resulted from the comparison of fossil remains with living animals, a system first brought into notice by the great Cuvier, and ably continued by Blumenback Lyell, and Buckland. From these researches in comparative anatomy, it appears that great changes must have taken place on the surface of the earth; that animals now found only in the torrid zone, once inhabited countries far to the north; that many kinds of animals, of which fossil remains are found in abundance, have become entirely extinct; and that many families now exist in the same regions where the fossil remains are found, of the same type, but very much smaller than those so discovered. Thus the family of the Armadillo is exclusively confined to South America, and on the plains of the Paraguay the fossil remains of the Megatherium, and two other gigantic representatives of the same family, are found. South America is also the place where the Llama is found, and very lately Mr. Darwin has discovered in Patagonia the fossil remains of one as large as the camel. Among the rodents the largest in statnre now living is the Capybara or river hog of South America, and Mr. Darwin has discovered in the same region the bones of one of this family as large as the rhinoceros; and the belief that some races of animals have decreased in size, has received a singular confirmation from New Holland, where the bones of a fossil kangaroo have been found much superior in size to the existing species of the same country. The whole of Dr. Lyell's address is well worthy of perusal by all those interested in the structure and history of the earth.

Article eighth, is a record of some experiments in producing motion by electro-magnetism, by Dr. C. G. Page of Salem, who has succeeded in constructing a machine, the moving part of which makes five or six thousand rev.

olutions in a minute. The discoveries of Mr. Davenport, have brought a multitude of competitors into the field; and as some of them are men of great scientific as well as mechanical ability, it is possible he may find his machine thrown into the back ground. At the last accounts, however, he had made some very great improvements in his machines, which had more than doubled their velocity and consequently their power, and he and his friends were confident of the most splendid success. Mr. Davenport is at this time employed in constructing a machine, the wheel of which is two and a half feet in diameter, and intended to work a Napier printing press.

There are a great number of valuable articles in the present number, besides those to which we have briefly alluded. One of these, a paper by Dr. Mease, on Spontaneous Combustion, will be found on another page of this number of the Farmer, as the numerous instances of loss from the above source render it desirable that the liability to such destruction from various causes should be extensively known. Another is a description of Prof. Morse's electricical telegraph, with a specimen of its working. Probably this will soon supersede all other modes of rapid communication between distant points; as experiments seem to show that intelligence can be instantly communicated 100 miles, and for aught that at present appears, 1000 miles, with the rapidity of lightning.

The Rohan Potatoe.

Several statements relative to the great productiveness of the Rohan Potatoe, a variety cultivated in France, were published in the papers some years ago. In 1835, John A. Thompson, Esq. of Cattskill, who, it will be seen by an advertisement in this paper, has a quantity of them for sale, procured some of the seed from France; and from his experience in cultivating them the two past seasons, he says he is perfectly satisfied of their great superiority for the table and their extraordinary productiveness. It is said that in France they have weighed as high as 14 lbs. Judge Buel says he planted 12 lbs. of these potatoes last spring. He divided the tubers into sets of two eyes each, and planted one set in a hill four feet apart, in a piece of ground much shaded, and in rather low condition. On the 28th of September they were dug, and found to weigh 525 lbs. and measured nine bushels. "We have hardly been able yet to decide upon the quality of this potatoe, having barely tasted of one; yet we deem it equal to the English white, orange or the common peach blossom variety, which are kinds commonly cultivated. Others, however, in whose opinion we place great confidence, do not hesitate to pronounce them superior for the table. They are undoubtedly the most productive variety of the potatoe we have ever met with."

A Fault.

Too few of our farmers are in the habit of making a proper estimate of the quantity of fuel their fires will require for the season; and hence it frequently happens, that the wood drawn during the winter, is entirely consumed during the summer, and the farmer is reduced to the disagreeable necessity of burning green wood at the time when dry wood & clear fires are the most pleasant and comfortable. This is a fault which a little forethought can easily remedy. It should be a permanent maxim with every farmer never to use green wood for fuel, certainly not in the winter season. Every one may make a sufficiently exact estimate of the quantity he shall use in a year, always taking care that any error in reckoning shall be on the safe side of too much rather than too little, and that quantity, be it more or less, should in the month of March be deposited in his wood house; or in want of that, carefully piled so as to be as little exposed to injury from the season as possible. Some men act in this matter as though they supposed green wood was better and more profitable than dry; but experiments made with the greatest care by scientific men, have demonstrated that one third less caloric was given out in the combustion of a given quantity of green wood compared with that which was well seasoned. It must indeed be obvious to all, that the heat lost in converting the sap of green wood into steam, and forcing it up a chimney, cannot be inconsiderable; besides the degree of heat or the quantity of wood required to produce it cannot be as well regulated, when green wood is used, as when the fuel is dry, and a serious loss is sustained in this way. When we add to these considerations, the tons of water uselessly hauled when green wood is used, and the terrible temptation there is to blaspheme, when after half an hour's incessant labor in a winter's morning with the thermometer at zero, nothing but smoke can be produced, we think the reasons are sufficiently weighty to induce our farmers one and all to look to this matter.

The time is probably not distant, when, by the opening of the Genesee Valley Canal, and a slack water navigation on the Allegany river above Olean, or a rail road, the coal mines of Pennsylvania will be opened to our citizens, and so far as the city is concerned, will in a great measure supersede the use of wood as fuel. Still that it will come into general use at once, or that the great body of the farmers will ever adopt it, cannot be expected, nor is it perhaps desirable. Use will determine its intrinsic value compared with wood; and this will of course regulate the demand. The visible necessity of husbanding fuel in this region where the temptation to cut down timber and clear land is so great, and none to replace it is planted, must be obvious to all. We have no waste lands unfit for cultivation, and therefore allowed to remain in woods; every year diminishes the quantity, and will still diminish it, and every farmer should remember that for every two trees burned green, a third one has to be fallen, which might have been spared, were the easy requisition of burning dry wood complied with.

Fruit Nurseries.

The increase of these repositories of young fruit trees, we hail as a proof that our farmers are beginning to tire of the worthless trash with which many orchards are filled, and are willing to be at some trifling cost to procure trees of first rate excellence, and ripening at different times. Some farms have good fruit, but no variety of succession. The list of fruit trees, apple, pear, cherry, &c. which we lately published from Bridgeman, shows that good fruit may be had the year round almost—with the apple quite—and most of the varieties there named may be found in our nursuries. The fall of the year is a good time to transplant; most of the desirable kinds of fruit can be furnished by the nurserymen of Rochester; and the canal, or the lake furnishes the best means of transportation. Orders for fruit trees, we presume would be filled out with promptness and at the fairest rates. A great variety of beautiful and useful shrubs and trees, both foreign and domestic, may here be obtained; and we may here be permitted to say that nothing more certainly marks the man of taste, than a supply of such ornaments of nature around his dwelling. It is this fondness for flowers and shrubbery, that renders the straw thatched cottages of England palaces, when compared with our naked brick mansions or barn like houses. A few days and a few dollars, spent each year by our farmers, or the dwellers in our cities and villages, would materially add to their beauty of their respective residences, and enhance the value of their properties.

Hessian Fly—Farmers Lyceum.

And why should not farmers spend some of their time during these long winter evening in learning something useful. I'll tell you, reader, how some who till the earth, employ their hours of relaxation? A few evenings since, a few neighbors chanced to meet at a country store, when the Hessian fly became a prominent subject of conversation. Several of the company had noticed the insect's appearance, this season,—and various tales were told respecting its ravages; as well as many gloomy anticipations expressed in reference to the farmer's prospects. One was certain the wheat crop must have been already injured past recovery. Another told of several, who, it had been said, were then ploughing up their wheat *to cheat the fly!* While all agreed that if the warm weather should continue a few days longer—the hopes of the farmer, for the early sown crop would be utterly destroyed.

They finally came to the conclusion that it would be quite a desirable thing for every one of the company to make himself more intimately acquainted with the habits and character of the said insect. Accordingly the following day at 2 o'clock P. M. was proposed for a meeting in a neighboring wheat field. The company all met agreeably to appointment. The grain had been sowed more than a month and now luxuriantly covered the ground. They soon saw the insect traveling about among the green blades, which were presently examined with the strictest scrutiny, both with the naked eye, and with glasses—but no traces of the fly could be discovered. Then they caught a number of the insects and subjected them to an examination with the microscope. The peculiar shape of many of these clearly indicated that the eggs had not yet been deposited. Yet there were reasons to believe that should the warm weather continue but a short time the process would be commenced.

And what was the use of this visit to the field?—Why it probably was the means of saving much labor and expense. First the ploughing up the field as preparatory to sowing again. This, of itself must be considerable inconvenience. 2d, The loss of the seed. And again, the crop thought to have been destroyed in embryo, might prove, if suffered to remain on the ground, of ten times the value of the one proposed to be substituted in its place, at this late season!

But these were not the only advantages derived from this visit to the wheat field. It furnished an opportunity for much instructive conversation, and some philosophical investigation. I have alluded to the examination of the insect with a microscope. A number of them were caught, placed in a small bottle, and taken to a neighboring house, where they were carefully examined by the parties much to their amusement, at least—if not instruction. I was particularly struck with the resemblance of the fly to the *Cicada Septendeum*, (or 17 year locust.) Through the glass, the wings appeared about the same size, as did also the body. The legs were covered with long hair which gave them quite a formidable aspect. The lateness of the hour when the examination was begun (the sun being then low) prevented a thorough investigation. But the company, well pleased with their entertainment, resolved to meet again.

Among the curious facts related on this occasion relative to the habits of this destructive insect, I was particularly amused with the one stated by one of the company, who declared that during the early part of the season, he had seen the insect passing over a field in considerable swarms. He observed as they advanced, that a portion of them were continually descending and falling on the earth—by which process he would judge that they might become pretty evenly dispersed over it. Observing many of them come in contact with the earth, he had the curiosity to pry into their movements when located in their new element. One thing seized his attention immediately—it was the restless, incessant activity of the insects when first falling. The object of all this turmoil was not at first seen, but, upon a more leisurely inspection, the fly appeared to be busied in *extricating its wings from its body*—an operation which, however unnatural it may appear at first view, is strictly in accordance with that unerring wisdom which characterizes all the works of nature—and is remarkably conspicuous in those instinctive propensities, which govern all the inferior orders of living creatures. A FARMER.

Buck's Co. Intel.

From the New England Farmer.

Beet Sugar.

We were much pleased by the reception of the following communication, together with a liberal specimen of the first fruits of a kind of domestic manufacture, destined, as we hope and believe, to become of very great importance to this country, by rendering us independent of foreigners for one of our greatest and most expensive articles of household consumption.

Salem, Nov. 8, 1837.

T. J. FESSENDEN, Esq.,—*Sir:* I take the liberty of sending you herewith, a small sample, from 5 lbs. of Beet root Sugar, manufactured by Mr. G. Perkins and myself, from roots grown at my cottage garden, at North Salem. In conducting this, our first experiment, we effected the process of rasping with my small grater cider mill turned by hand, and

expressed the juice from the pulp, by means of an old fashioned condemned lever press.

With so rude an apparatus as this, we could hardly promise ourselves any extraordinary results; in fact, our only object was, to satisfy ourselves that we could produce chrystalized sugar. We obtained 8½ gallons of juice from the 200 lbs. of beets, and taking Chaptal for our guide, followed out the process as delineated by him in the latter part of his Agricultural Chemistry; a book, by the way, which should occupy a place on the shelves of every Farmer's Library.

I have about 1000 lbs. of the sugar beet in my cellar, with which we intend to pursue our experiment, as also that of refining; and should we succeed in this last and most important process, we shall avail ourselves of an opportunity of presenting you with a loaf of our first and finest quality. With much respect, I remain your friend and servant,

PICKERING DODGE.

Experiment in Harvesting Corn.

We think it has been well established, in repeated experiments, that the old, and in many cases present practice, of topping corn, very considerably diminishes the quantity of grain, a result which vegetable physiologists had long ago proclaimed. Desirous of knowing how far the product would be diminished by cutting up the entire crop, at the ordinary period of topping, we invited the public attention to the subject in our March number, and have subsequently instituted a small experiment, the result of which we give below. We do not mean to intimate that this experiment is conclusive, though the result is such as we expected; and we therefore again invite gentlemen who may have experimented in the matter, to forward us the results, in order the better to arrive at a correct conclusion, in a matter which is certainly of high interest to the farmer; for if other trials justify our conclusions, an immense loss is annually sustained by the practice of topping corn.

On the 16th of Septembe we selected thirty-two hills of corn—being a good sample of two acres—in four contiguous rows, eight hills in a row, and topped them in the old way.

We selected thirty-two hills in like manner, adjoining the preceding, which we cut at the roots, and stooked at the same time.

And we left thirty-two hills adjoining the last, to ripen on the entire stalk.

The three parcels were apparently alike.

On the 9th of October, we picked, husked and weighed each parcel separately. The weight, and number of ears, of all descriptions, were as follows:—

No. 1 standing,	weighed	62¾,	and had	139 ears.
No. 2 cut up,	"	63¼,	"	145 "
No. 3 topped,	"	55½,	"	135 "

We then equalized the number of ears, by taking four from No. 1, and ten from No. 2, leaving 135 in each. The weight was then as follows:

No. 1 standing, - - -	61¼ pounds.
No. 2 cut up, - - - -	60¼ "
No. 3 topped, - - -	55½ "

The field having been planted precisely three feet distant between the rows, and about two and a half feet the other way, would average 5,808 hills on the acre. The acre would, therefore, according to the above results, give the following product in pounds:

The standing corn,	-	-	10,616 pounds.
The cut up	do.	- -	10,436 "
The topped	do.	- -	9,982 "

It follows, that the loss by topping an acre would be 634 pounds; do. by cutting up 181 pounds; and that cutting up has an advantage over topping of 453 pounds, independent of the important gain in the forage.

We then shelled a bushel, which required 78 pounds in the ear,—the grain weighing 53 pounds and the cobs 25 lbs. When perfectly dry the corn weighs 60 to 62 pounds. Dividing the total pounds per acre by 78—the number of pounds of ears required for a bushel of shelled corn—the product in bushels, under the different modes of management, would be as follows:

Standing corn,	136	bushels	8	pounds.
Cut up "	133	"	62	"
Topped "	127	"	76	"

Deduct ten per cent. for shrinkage, on drying to a merchantable condition, and the product would then be as follows:

The standing corn, per acre,	122	bushels.
The cut up do. "	120	"
The topped do. "	114	"

That our southern patrons may understand the cause of this great product, it will be only necessary for us to state, that in our mode of planting we produce on an acre, if there are no deficiencies, as there need not be if plenty of seed is put in, 23,232 stalks, which on the assumption that each stalk produces an ear, and that the ears average a gill each, which is much under the mark with the Dutton corn, the product would be about 90 bushels. The southern corn, at four and a half feet distance, two stalks in a hill, would give only about 4,300 stalks: now supposing this to be the Baden variety, giving four ears on a stalk, the total number of ears would be but 17,200 on the acre, or about 6,000 ears, or gills, less than our Dutton crop, with one ear on a stalk.—*Cultivator.*

Cows.

The following statement of the cost, expense, and the avails of a cow for 14 months, made by a gentleman of this city, who has been a practical farmer, and who is no bad cultivator, shows how profitable cows may be with proper management. A farm of 100 acres, by such calculation and management as stated below, supposing it kept only 12 cows, would afford an annual income of at least $1600.

Dr.—Cost of cow and calf,	$20	
Paid for pasturage,	15	
1½ tons of hay, at $15,	22	00
One ton corn-stalks,	6	
Twenty bushels bran, at 20c.	6	
266 lbs. oil cake, at 1c.	2	66
40 bush. turneps and potatoes at 20c.	8	
8 bush. potatoes at 42c.	3	36
	$87	62
Cr.—By calf sold,	$5	44
10 qts. of milk per day, for 14 months at 5 cents per quart,	210	
Cow sold for beef,	45	84
	$291	28
Nett profit,	$173	76

N. E. Farmer.

From the Farmer's Cabinet.

Lime.

Having been requested by you to give some views of lime as applied to agriculture, I have refrained from so doing, until time has been afforded for a degree of personal observation. In agriculture, especially, theory, however plausible, should be advanced with diffidence, and submitted as soon as convenient to the touchstone of ROGER BACON—*experiment.*

The limestone of Whitemarsh, Montgomery county, Pennsylvania, my place of residence, is primitive, and remarkable for the purity of the lime produced from it. Fifty bushels, kiln measure, to the acre, are considered sufficient for our strong valley land, under a succession of crops for six years. The application is frequently made after the lime has been exposed in large heaps, to the action of the elements for many months. In regard to the most judicious method for the introduction of lime to the soil, opinions vary; but almost all agree that every crop, is materially benefitted by any of the usual modes of spreading.

The effect of lime in decomposing vegetable matter is well known.

Near the last of 8th mo. (August,) 50 bushels of lime to the acre were spread over a clover field almost run out, from which a first crop of grass had been taken at the usual time. The second crop grew tolerably well, and was ploughed down with the lime, preparatory to seeding with winter grain. At the interval of four to five weeks the ground was cross ploughed, and the vegetable mass of grass, weeds and roots, found to be almost pulverized, and incorporated with the soil.

It is customary with many farmers in this vicinity, to appply a handful of ground plaster to each hill of Indian corn, after it appears a few inches above ground. A small portion of a corn field thus treated, was last spring reserved for an experiment, with the same quanrity of powdered or fine lime applied in like manner.

The result has been in favor of the lime, both the stalk and ear of the corn, being much superior to the average production of the field.

Your friend,

MORRIS LONGSTRETH.

Valley Green, 10th mo. 2d, 1837.

Woodland.

Almost every farmer among us is now sensible of the importance in saving and raising wood for fuel and timber. In some places where only a few years since the stately forests were cut away and the trees destroyed or consumed in the cheapest manner for the purpose of clearing the land, there is now felt a scarcity of wood. We have known cases where in clearing lands the wood has been given away, and yet in a few years had the trees been standing they woald have been worth more than all the income of the cleared land up to that time—such has been the rapid manner in which the wood and timber has been inconsiderately destroyed; and while the woodlands have been cleared up, other parts of the farm, in many instances, have been growing up to brambles and bushes, and many farmers have found that they have cleared up more land than they can well manage, and that a part of their farms are not now worth more than half so much as they were before the axeman's blows were heard among them. The impropriety of destroying wood so fast, is now plainly seen in many parts of the country as fuel is growing scarce, and our cold long winters admonish us of the value of this article. Considerable attention is now given to saving and raising wood, but only a very few in this state manage right in this business; the general custom is to cut out the old and decaying trees in different parts of the wood lot that the more vigorous trees may grow. In old countries where men have had experience in raising wood, they find it the better way to cut the trees all off clean and in a short time there will be another good growth as the trees will grow very rapidly when they are all young and there is no large trees to shade them. Young trees will not grow so long as there are large trees near them, and though the largest trees of an old growth be cut away, the smaller ones will grow but moderately, and one acre of young trees where the old ones are cut away will produce as great a growth in a year as five or six acres of old growth, even where the least vigorous trees are cut out. One tree of moderate size will occupy a large space and grow moderately, while if it was cut away ten or a dozen would spring up in the place and produce five times the growth. The practice here recommended, which is the result of experience in Europe and in the oldest parts of this country, should receive the candid attention of every owner of woodlands.—*Yankee Farmer.*

Relative value of Plaster and Ashes for Corn.

I took three rows in a small piece of corn beside my garden, and put a handful of ashes on each hill of one, a teaspoonful of plaster on each hill of another, and the third left without putting on any of either. I cultivated them all alike, hoeing them twice. During the season some pigs got in and rooted up one end of the rows, leaving but about five rods of each that came to maturity. In the fall I husked the rows as far as they had not been injured, and weighed the ears of each:

Weight of the ashed row, - -	49¾
" " plastered row, - -	48½
Weight of the row which was neither plastered nor ashed, - - - -	41¼

The ground was greensward turned over in the spring; the soil clay, inclined to a loam.—*Buckeye Ploughboy.*

CURE FOR WARTS.—Rub warts with muriate of ammonia, and it will remove them without pain. If they are very hard, it may be necessary to touch them a few times with nitric acid, which will effect their removal more speedily, but will be attended with some little pain and inflammation. These articles will be found in every Drug shop, and a few cents will procure enough to cure a dozen.—*Ib.*

COMMUNICATIONS.

Auroral Lights.

One of the most beautiful and splendid exhibitions of this kind ever observed in this country, was witnessed last evening, Nov. 14th. As it must have attracted universal attention wherever visible, I have been induced to throw together a few hints as to its appearance here, for the purpose of comparing them hereafter with observations made elsewhere. The day preceding was cloudy; wind in the north; and the thermometer about 30°. Just before sundown the clouds seemed breaking up, intervals of sky appeared, and the sun went down in a reddish haze, but without any pencils of rays. A little before six the clouds had mostly disappeared, and streaks were observed extending from the north to the south, resembling the cirrus of meteorologists, while the whole sky seemed of a whitish hue, as though a silver haze was spread over the whole horizon. About six o'clock or a few minutes previous, this haze appeared to fold into masses or pillars, and were evidently auroral in their nature, moving from east to west, and changing from a white light to a most beautiful rose colored hue. At six o'clock, and for a few minutes afterwards, a stream of this red light shot up from about three degrees north of east, and passing directly through the zenith faded away in the west. Two large masses of the same red light were visible at the same time in the N. E. and N. W., connected with the highest arch by splendid pencils of white light, which at times seemed to flow into, and overlay the brilliant red of the arch. At this time, 10 minutes past six, the rose colored light predominated so much as to give that hue to all objects, and sensibly tinge the clouds that still lingered in the south.—These masses of light soon dispersed; the white light gained the ascendancy, and gradually covering the southern sky, became so thick and dense that but a few stars, and those the most brilliant, could be seen in that quarter of the heavens. Now and then a gush of roseate light would flash up, and the northern sky appeared more broken into masses, and oftener assumed the red hue than those of the south. About 9 o'clock, however, the most splendid display was visible. The black arch which in auroral exhibitions usually rises but a few degrees above the horizon in the north, now passing the zenith, spanned the whole heavens, black as night. Adjoining on the south was a strata of beautiful white light, and still farther, yet all three embracing but a few degrees in width, was a splendid belt of red or roseate light, melting into and blending with the white which covered the southern part of the heavens. It was for a minute the most magnificent of rainbows. Soon it changed, and the coronal which usually accompanies lights of great elevation was rapidly formed. At 12 minutes past 9 o'clock, red and white pillars radiated from a common centre in the zenith and occupied within their circumference more than a quarter of the horizon. The mass of light and splendor formed at the point of junction was great, and in the general illumination the moon seemed useless and thrown entirely into the back ground. From this time the dispersion was gradual; though occasional flashes of much brilliance lasted till a late hour, and until clouds gradually floated up from the north and obscured the heavens. At 2 o'clock there was a slight fall of what is called round snow, some of which was visible this morning. To-day, Nov. 15, the wind is in the N. W., the thermometer 30°, and the sky overcast.

I was induced to pay more attention to these appearances than I probably orherwise should have done, from the fact that the 12th, 13th, and 14th of November constitute the days, or rather nights, in which the annual meteoric shower of falling stars so ably described by Prof. Olmsted has hitherto appeared, and confirmation of the theory or its refutation, must depend on further observation. All three of the evenings were unfavorable for observation at this place, the two first being cloudy, and the last such as we have described, with the addition of a bright moon after the aurora had departed, and the clouds occasionally broke away.

There are some things connected with the northern lights, worthy of more notice in the present advanced state of science, than they have hitherto received. For instance, I have noticed no explanation of the reason why in these auroral exhibitions the movement of the masses is invariably from east to west, or at right angles to the meridian. The pillars of moving light that rise from the northern arch; the stream that spans the heavens from east to west; the flocculent masses of light that are sometimes spread without visible connection over the northern horizon, all take the same direction in their movements, all advance from east to west. It should be observed however, that when these movements are said to be at right angles to the meridian, the magnetic meridian must be understood, which, owing to the western inclination of the needle, it is evident differs somewhat from the true meridian. Thus these arches of light that span the heavens, and several of them have occurred within a few years, at the moment of passing the zenith, have their base a few degrees north of east, and disappear in the same direction a little south of west.—Does not the discovery made by Ampere, that a magnetic current is always passing from east to west around the northern pole of a magnet, throw some light on these movements, and not only on these, but does it not also assist in determining the nature and origin of auroral exhibitions? Whether the beautiful coruscations of last evening have any connection with the cause that in former years has produced those showers of stars; or whether other observers more fortunately situated, have detected at this time those supposed annual visitants, I do not pretend to guess; time must determine.

WILLIS GAYLORD.

Otisco, Onondaga co. Nov. 15, 1837.

Experiment in Raising Corn.

MR. TUCKER—I planted this season three different kinds of corn in three separate lots—a white corn with a long slender ear, the seed of which was obtained from Catskill—the Dutton—and a yellow corn of eight rows. The first was on a light soil that had been under constant tillage by my predecessor for a number of years. I manured highly with yard and hog dung, and with lime. The corn came up beautifully, was plastered when two feet high, and grew well until half grown—and finally proved almost a total failure.

The Dutton was planted on similar soil, that had been exhausted, and left for two or three years past to form a light sward of spontaneous grasses. This was manured the same as the first—turned out much better, but was not a full crop.

Among both of the above, I sowed turneps after the last hoeing. The products bore a relative proportion to the corn.

The third kind was planted on a soil not unlike the first two, but a sward of several years growth that had been well plastered two years before. A part of it had been broken up the year before, manured with a compost of bone dust, yard manure and scrapings, and a fine crop of pickles was obtained. This part was not manured at the time of planting corn—part of the remainder with bone dust and a part with yard manure. The whole was a very fine crop, particularly that on which the pickles were grown, being naturally the best soil.

The conclusion I draw from the above is, that it is a waste of manure to apply it to an exhausted soil with a view of obtaining an exhausting crop. The proper treatment would have been, to plough and sow grass seed without putting in a grain crop.

I learn from my neighbors that the lot in which the first kind of corn was planted, has not been known to produce a good crop for years past.—Here I would advise him who purchases a farm to inquire of the owner or of his *neighbors* respecting the management of the farm, particularly of those lots left in fallow. By neglecting to do this, I have lost, this season, half of my labor, half of my manure, and half of my crop. S. F.

November, 1837.

Farming in Ohio.

FRIEND HOLMES:—I write you at this time from a town, the name of which you perceive at the head of my sheet, on the Muskingum river, 18 miles above its confluence with the Ohio, at Marietta. Its settlement was commenced at about as early a period as that of any town in this State, being coeval with that of Marietta, (1787,) and like that town was settled by people from the States of Massachusetts, Connecticut, and Rhode Island. It is chiefly an agricultural town, and probably contains some as good (or nearly as good) soil, and can boast of some as good farming, as any town in the State. Its situation on the river is very much like that of your Kennebec towns; viz. Farmington—and often reminds me of it. It has a great deal of intervale, or 'bottoms'—some high and some low. The high is here called '*plain land*,' but it is evidently of alluvial origin, and there is no doubt that at different periods of the 'far back ages,' the river has had its channel where the whole of this land now lies. Its channel has always been deepening, so that the intervales as they were formed, would be gradually lower, according to the lateness of their deposit. These remarks will apply to much of the level land, near the streams, in this county. This town, taking into view the appearance of the farm, as regards buildings, fences, and general neatness, has more resemblance to a flourishing New England farming town, than any I have yet seen in this State. The farmers have large, commodious, well finished houses, with neat yards in front, good spacious barns, granaries, and other out-houses. The products are Indian corn, wheat, beef, pork, (the latter in great quantities,) some butter and cheese, apples and cider, for the 'down river' market. Indian corn is planted the last of April and first part of May, and is harvested the last of September or the first of October, and the ground generally sown with wheat and grass seeds. The clover seed, however, is generally sown the succeeding spring, while the ground is soft. It is afterwards mowed or pastured such a number of years as may be convenient, when the same rotation is again commenced. Sometimes two or more crops of corn are taken in succession; and sometimes, the richest ground is even kept in corn *twenty* to *forty years* in succession. The average crop of corn on the best lands here, is fifty to sixty bushels. Of wheat, twenty to twenty-five bushels. Wheat is raised on the hill lands. The lands while in grass are pastured or mowed. They are broken up in August, and if the land appears to require it, a coat of clover or other grass is turned in for manure. The wheat is sown in September or first of October, after the grass turned in has had sufficient time to ferment. On good wheat lands, two crops of wheat are frequent-

ly raised in succession—the last crop being sown immediately after ploughing in the stubble of the first. This does well where lands have been pastured with sheep, and it does not appear to be necessary in such cases, (that is, where sheep are kept on the ground three or four years,) to turn in any grass for manure.

I will just cite you to one or two specimens of farming in this town, specimens which would do honor to any town or to any individuals. Capt. Rotheus Hayward, a 'Yankee,' from the 'Old Colony, (Mass.) but who has been here upwards of 30 years, has a farm, which, before he disposed of one hundred acres of it to his son, consisted of seven hundred acres, and extended three miles along the bank of the Muskingum, embracing some of the finest and best intervale in the country. He has between forty and fifty acres of corn the present season, which I should think would average fifty bushels to the acre. He has twenty hogs from twelve to eighteen months old, (besides thirty or forty shoats and younger swine,) either in part or entirely of the genuine Bedford breed. His old hogs are most decidedly the handsomest lot of the number, I ever met with on one farm in my life. I have seen some as handsome hogs, but never saw so many together. He has a full blooded Bedford boar, which excepting his head, is equal to any boar I ever saw.

Benjamin Dana, Esq. formerly of Vermont, has a most beautiful farm of fifteen hundred acres, lying in one body, also on the Muskingum. He has a fine house, with well ornamented grounds around it; and I have seldom seen so large a number of outbuildings. He raises from fifty to an hundred acres of corn annually, keeps a large herd of cattle, and fifteen hundred Merino sheep. I examined some of the latter, which were very good animals, though the fleeces are not so heavy, or quite so fine as the fleeces of some Merinos in your State. Mr. Dana has devoted considerable attention to the raising of neat stock. The first settlers of Marietta and vicinity, brought their first stock with them from Massachusetts and Rhode Island. Mr. Dana, in breeding cattle, has confined himself to the stock of the country, till within a few years; selecting his breeders chiefly from his own herd, and breeding with a view to improvement in symmetry, &c. By this management, his stock have the appearance of a fixed breed, though they bear a considerable resemblance to some of the Rhode Island stock I have seen ten or fifteen years ago. He is *now* crossing his stock with the Improved Short Horns, and has some very pretty young cattle of the mixed breeds.

As to crops, Ceres and Pomona have both been avish in the bestowment of their favors, this season, and grain and fruits are in unusual abundance.

The first 'Yankees' that came out here, were mindful of the convenience and comfort of having plenty of good fruit, and early planted out orchards and obtained the best varieties of apples, &c. from New England. They have succeeded to their heart's content. I can truly say that I never saw such apples and peaches, as are found in the greatest plenty in some of the settlements of this State. Bushels and bushels of excellent peaches have rotted on the ground this season, in spite of all that could be done to prevent it by means of kilns and dry-houses, and the devouring jaws of *bipeds* and *quadrupeds*.

I went out into Mr. Hayward's orchard this morning, and picked up four apples not more than an average size among the largest, which weighed 3 lbs. One of them weighed fourteen ounces. Mr. H. thinks he might have made five hundred barrels of cider this season, but the low price of the article will not pay the cost. Yours, &c.

A WESTERN CORRESPONDENT.

Bee-Moth and Bee Management.

MR. EDITOR:—According to promise, I will pursue this subject, with some apprehension lest your editorial note may have induced the belief that I was about to divulge some mysterious and sovereign specific, for the destruction of these hateful insects. So far from it, the plan, which I at present pursue, is exceedingly simple, and susceptible of universal application; and may not have been practiced by me alone, or by me first. But as I tried many unsuccessful experiments, and lost many valuable bee-stands before I adopted this plan, and as it has been quite satisfactory thus far, and it is not generally practiced, I cannot refuse to communicate it, according to your request.

A shed should be built with three sides closed tight, and with the other side open to the east, high enough under the eave to admit two bee-benches, one above the other, and broad enough to walk freely behind the stands, with a door in one end of the shed for persons to enter it. The boxes should be arranged upon these benches with their entrances outward, so that the bees will be under no temptation or inducement to come behind them.

The boxes should be 20 inches square in the clear, made of thick seasoned plank well put together, with tight joints. The bottom of the box which sits upon the bench, should be beveled from the outside to a sharp edge. Cross sticks should be put in the box, and notches made for the bees to enter, in the usual manner: and large holes should be bored in the top of the box, to be covered with a cap twelve inches square, beveled as above, after the box shall be well filled. When the bees begin to work in the spring, the boxes must all be raised upon the blocks put under the corners, high enough to permit the bees to pass freely under them, but not high enough to admit mice. The blocks must be high enough for the box to sit upon them without rocking or slipping. A light, slim, wooden paddle should be made, with a handle about eighteen inches in length, and with a short, thin, elastic blade, and should be kept always in the bee-house. With this instrument in hand, the bee master must walk behind the benches, and tilt the boxes over from him, look into them and search for, and destroy with the paddle, any flies or maggots which may be found. The house being open only in the front, and the bees being accustomed to fly out only on that side, this operation may be performed with security and at leisure. Indeed it will be a pleasant place, which may be resorted to at any time, day or night; and the bee manager, whether male or female, so far from finding it an unpleasant or perilous task, will find it an agreeable and profitable amusement, and will be so much interested with the bees as to visit them too often for the moths to make much progress before they are discovered and destroyed.

If you wish to take some honey, a cap may be removed at any time, an empty one put on the box, and you may retreat through the side door, without the least inconvenience to yourself or interruption to the other bees.

The blocks not only serve to prevent a lodging place for the maggots, but also prevent the bees from being mashed when the box is set down, after being inspected. Nails have been recommended instead of blocks, but the difficulty of inserting and removing them renders them objectionable.

There is no effectual virtue in the nails, or in the blocks, or in the manner or material for making the boxes; or in drugs or liquids to drive the moths from the hive. *The boxes must be raised up, and inspected frequently and carefully, and the moths and maggots killed with the paddle.* This will give but little trouble and much pleasure and profit too, if the bee house is constructed on this plan, and is conveniently situated, so that the bee master can often step in and spend a leisure moment in witnessing and assisting the labors of these his industrious and unhired servants.

For this sort of attention my bees have this year repaid me with over two hundred pounds of delicious honey, and with many new swarms. 'Tis true I have had to inspect them often and kill many moths; and have lost two stands by depending upon the blocks and bees too much and not using the paddle enough. Your friend, R. W. S.

[*Franklin Farmer.*

Worcester Cattle Show.

The annual Cattle Show of Worcester county, was held on the 11th ult. The exhibition of stock was very fine. The reports of the various committees are interesting, and we shall endeavor to abridge them for a future paper. That of the Committee on Swine is subjoined without abridgement. The Ploughing Match was an interesting portion of the exercises of the day, and excited much interest. A great multitude were on the ground to witness the contest in this trial of skill and power. The Agricultural Address was given by the Rev. Mr. Allen of Shrewsbury; and is stated to have been a production of high character, and a specimen of good taste and fine writing.—*Boston Cour.*

THE REPORT ON SWINE.

The Committee on Swine, with humility, submit their Annual Report. It has been more than "glory enough," for them, to serve in the elevated station they have occupied. Earthly ambition may well be contented, when cheered in the discharge of high trusts, by a voice more impressive than that of the people, the still, small voice of the pig. Received by their four-footed associates with affectionate regard, the Board of Swine have nothing further to desire for themselves. But injustice would be done to the feelings of the Trustees, and the obligations of gratitude to seventy-two inmates of the pens neglected, if they failed, in speaking of themselves, or of the race predecessor of man's existence, to claim, and to bestow, those titles of distinction which the universal custom of New England prefixes or appends to all other names. They do, therefore, state, that the *Honorable* committee most respectfully waited on the *Misters* Pigs, the Boars *Esquires*, *the Honorable* Sows, and *their honors* the Hogs.

A vast concourse convened, this morning, of all ages and sizes, from the plump child-pig, just stepped from the cradle of infancy, to the extensive creature entering on the gravity of swinehood. Never, before, has the festival of the Society been so honored. Whether the enlarged attendance was a token of approbation of the bright blue sky of the day, or a tribute of friendship to the judges, it becomes not them to determine. Amid the great assembly, there were a few individuals who, with disturbed breathing and abstracted looks, appeared as if they had not paid their taxes, or had not specie to discharge post-office bills, or had visited a bank director to solicit extension of notes over-due, or had been to law, or were coming back again, or proprietors of eastern or western domains, or were about to draw up a report, or were candidates for office; or had been afflicted with some other of the epidemic evils which have scourged the community. But generally, there was an air of placid repose, as if, notwithstanding the excitement, calamity, and pressure of the times, their bodies were at rest, their minds at ease, and themselves enjoying the extensive luxury of a tranquil conscience.

Lord Bacon divides human knowledge into memory, reason, and imagination. Close analogy suggests the classification of the magnificent display of pork, under the heads of Boars, Breeding Sows, and Weaning Pigs.

Boars exist every where; they used the pens of the Society freely. For the one judged to be the most perfect, offered for premium, FIVE DOLLARS were awarded to Mr. George Jones of Worcester; for the other very worthy Pig of Mr. Jotham Bartlett of Northborough, THREE DOLLARS were assigned.

In one of the departments, there was an animated and busy scene. Twenty-two unweaned pigs, from eight to twelve weeks old, exemplified the power of suction, by drawing, with unwearied diligence through convenient apparatus of hose, the fluid of milk from the copious reservoirs of three sows of Mr. Wm. C. Clark, landlord of the United States Hotel. The ability to increase population was so approved, that the Committee unanimously bestowed on the fruitful mothers of the three infant families of industrious laborers, the *first premium* of FIVE DOLLARS.

Before entering on the consideration of the rewards proposed for weaned Pigs, it becomes the mournful duty of the Committee to communicate information of a most afflicting event. Stephen Salisbury, Esq., of Worcester, last evening entered on the records the names of four most interesting animals. One, in the full vigor of youth, just entering on the morning of life, and of the day, with brilliant prospects of future usefulness, exhausted by over exertion to reach the pens, fell a victim to zeal and heat, and was snatched away by an untimely death. While the Committee condole with the owner of the deceased pork, on the unhappy fate of this martyr of patriotic devotion to the cause of agriculture, they trust he will find consolation under the sadness of the bereavement, in the virtues of the survivors, and in the eulogy pronounced

by the Chairman of the Committee of Manufactures. Had our departed friend been present, the first premium of six dollars would have belonged to Mr. Salisbury. But the statutes of the society require that the Pigs should not be less than four in number. The laws are sacred; they cannot be dissolved by any corroding acid of construction. It is therefore recommended, that instead of a premium, a gratuity of equal amount be tendered to Mr. Salisbury, with the assurance of our sincere sympathy; and that any member of the Society who may be invited by that gentleman, do attend the funeral obsequies of his pork.

Misfortune seldom falls single; that bitter fruit is borne, like the grape, in clusters. The gloom thrown over the day was deepened by another melancholy incident. An amiable pig of Mr. Geo. Jones arrived on the Common in good health and spirits; but finding every pen filled, retired to private life, and died on his return home, as is supposed, broken-hearted, with grief and mortification at being excluded from a place.

Capt. John Barnard of Worcester, deserved the second premium of four dollars: it is given to him according to the deserts of his pigs.

While the Committee have finished the discussion of the claims of the competitors for the sums stated in the printed bills, they have scarcely commenced the examination of the merits of the noblest company of swine that ever graced the annals of our history.

Mr. George H. White of Worcester, exhibited a prodigious white sow, of the Bedford lineage, looking like two single creatures rolled into one. This female was elegant; all females are. Unlike the fair daughters of *our* race, she had no slenderness, but a boundless circumference of waist. Estimated by the modern standard of political economy, this animal was a *monster*, an *accumulator* of fat, a *monopolist* of lean, an unwieldy *corporation*, a *deposite-bank* of pork. The Committee might have doubted of the constitutionality of such an animal; they took a wiser course. Accustomed to resort to those gentlemen of the cabbage tribe, who in imitation of the philosophers of Laputa, take observation of personal dimensions with a kind of quadrant to fit coats and long-tailed bills, for information of external proportion, they procured men and measures from the shop of a friend of the tailor's craft. It resulted from the survey of Mr. William Brown, that the length was five feet eleven inches, the breadth one foot ten inches, the circumference five feet eight inches, and the dead weight, while alive, about half a thousand pounds. This gentleman gave his professional opinion, that ten yards of Lowell prints would be required for a fashionable gown to clothe the lady, exclusive of an equal allowance for sleeves.

From the State Lunatic Hospital came sixteen sober Hogs, of great dignity of manners. The evil spirits exercised from the walls of that noble asylum of misfortune, by the powerful spells of the mild treatment and rare medical skill of Dr. Woodward, have not been suffered to enter into the swine. They were the best conditioned and best behaved of the whole convention. One of them had permitted his body to grow over his head, so much as to almost obliterate the chief end, to quite create resemblance to a ball, and entirely confer the capacity of motion in any direction. The Committee would willingly give a reward to the Commonwealth for her fine swine; but as Massachusetts requires no encouragement in good works, they recommend a gratuity of two dollars, to be paid to Mr. Ellis, the careful attendant, out of the reserved profit derived from an unclaimed premium still in the treasury.

The Pig of the Secretary, Edwin Conant, Esq., stood, but not alone. The excellent recording officer furnished an entertaining biography of the talent of pork committed to his care. The subject of the memoir he furnished was born in Worcester, on the 10th day of March, A. D. 1837. Sumptuary laws, his owner stated, had been so rigidly applied to him, that, of meal, he had had but three meals in his life. Since the middle of September, he had obtained the occasional, but unfrequent luxury of a boiled dish of very small potatoes and declining pumpkins. During his life he had refused to eat above a half a bushel of corn, possibly because it was not offered for his acceptance. His decease may be expected about Thanksgiving time. Peace to his spare-ribs.

George W. Richardson, Esq., of Worcester, exhibited a Pig of such exquisite dimensions, that it afforded unalloyed satisfaction to contemplate the prospects of the judicial profession and of pork.

Mr. Edmund P. Dixie presented an animal, long, deep, broad and thick. He claimed no premium: the best one which could be given will be hereafter found in the rich treasures of his barrel, and the luxurious spread of his table.

Mr. George H. White placed in the pens a Boar, which was considered by the Committee one of the best of the show. As the owner could not conveniently keep him according to the rules of the society, the Committee can only award to him a large premium of praise.

There are said to be persons in the world so unconscious of the fitness of things and the harmonies of creation, as to be insensible to the beauties and perfections of a hog. The square roundness of figure, the compact thickness of the form, the bright intelligence of the eye, the Grecian straightness or Roman curve of the nose, irresistably command admiration. If any person would cultivate a refined and delicate taste, let him visit the styes of Mr. White, Mr. Dixie, Mr. Richardson, and the recording secretary, and delight his senses with living models of excellence.

A Boar, entered by Mr. Samuel Hilliard, from the farm of Hon. John W. Lincoln, did not make his appearance until the Committee had made their disappearance, at a late hour. The Pig of Mr. Oliver Adams was no where within their jurisdiction. Great disappointment was felt at the absence of the swine of Mr. Emory Perry, Professor of Music, as, from the skill of their accomplished master, an agreeable duet or anthem might have been expected. The Committee may be pardoned for omitting comments on the merits of the invisible.

He who would lose an opportunity of renewing or pursuing inquiries on the subject of animal magnetism, the engrossing topic of public attention, among creatures so peculiarly fitted to exhibit the wonderful phenomena of the science, must have a genius for salting sheep; the Committee have not. Strong susceptibilities were manifested by one of the fattest pigs: on being rubbed with a fragment of rail, it sunk into a profound sleep. It was powerfully magnetized with a section of rusted iron hoop; as no glowing description of distant scenery or enigmatical narratives were forthcoming, it was concluded that the soul of the somnambulent pork had gone to New York, to examine the paintings which adorn the study of Col. Stone. The hurry of the occasion did not permit leisure to await its return. So the experiment may be considered as terminating in that consummation to which other trials may arrive, no good end.

It should be matter of heartfelt gratulation to every free citizen of this wide spread republic, that in the course of human events, he is himself, and not his own great-grand-father, or his own great-grandson. The enlightened condition of the age is in no better way demonstrated, than by the correct estimate of the worth of the most amiable of races. There are those who look backward to the past, and onward through the future. The Committee looked only to the present and the pigs. From the contemplation springs deep rejoicing. The character of the pig never has been, and probably never will be, better appreciated than by the existing generation. On such a subject, it is with great difficulty one can prevent himself from growing as eloquent as caucus orators do. Where has genius breathed his loftiest aspirations—where science extended her empire widest—where improvement urged on her renovating work—where cultivation strewed the earth with beauty and the wilderness with blossoms, and the *hog* not been there? What prosperity has brightened existence—what happiness gladdened life, what virtue enriched the heart, where the *pig* has not been cherished? The committee pause for a reply.

They will express their feelings: they are anxious to avoid all speculation, and solicitous to present only plain facts, and useful practical remarks, which may benefit the swine and their posterity.

With all the gentle graces and silent virtues which encircle the pig, there is one spot in the white light of his excellence. The innocence and quiet tenor of his life is unpleasantly contrasted with the base uproar he makes when having his throat cut at its conclusion. As one of the noblest bards of England almost says, the hog

> "In corporeal *utterance* makes a *noise* as great
> As when a giant dies."

The error needs only to be pointed out to be amended.

Notwithstanding the appearance of prosperity, it is sadly to be feared there are secret evils springing from the temptations of the times. In imitation of high authority, the Committee decline to commit themselves, and beg leave to refer to former reports for the full expression of their sentiments. It cannot be concealed, that there is something rotten in the state of porkdom. The political wisdom of the pigs has been disturbed. The swine of New-England have over-traded; they have been seduced into rash speculations in their natural domain of mud: they have indulged in frost-bitten fancy cornstalks; they have relied on the payment of the instalments of the surplus revenue: they have departed from the solid circulation of grain, and devoted themselves to a depreciated currency of dust and weeds.

Solemn inquiries for remedies press on the Committee, which they feel bound to *propose*, but are under no obligation to *answer*. Would it not be expedient to establish a national bank of corn, to regulate the exchange of pork? Would it not be proper to codify the laws of eating, fix the gauge of troughs, and establish the certainty of meals by inflexible definitions? Would it not be well to invite Miss Martineau to make the tour of the styes, and draw thence dissertations on philosophy and government? Should not circular letters be *franked*, and distributed, proposing many hundred questions to the principal citizen pigs of the State? Or should well be let alone?

The committee have said too much: further they say not. WILLIAM LINCOLN, Chairman.

Duties of Husbandry.

In view of the high duties and responsibilities which devolve upon the farmer, as a parent, a tiller of the soil, and a watchman on the citadel of freedom, it becomes us to inquire, what are the best means of enabling him to act well his part on the theater of life, in the several capacities that have been enumerated.

The duties of a parent to his children may be comprised in a brief sentence:—teach them what good men in every age, as well as divine inspiration, have defined to be the cardinal virtues—LOVE TO GOD AND GOOD WILL TO MAN—teach them to be industrious, to be frugal, to be temperate, to be humble, to be honest, to be kind hearted—and TEACH THEM BY EXAMPLE.—*J. Buel's Address before the Berkshire Ag. Society Oc'.* 5, 1837.

Health.

Health is among the first blessings of life, and the prudent man will always endeavor to secure it for himself and family. This may be promoted by many little attentions which some do not know how to value, and which others, knowing, shamefully disregard.

Temperance, in all our animal indulgences, as well as in our passions, is particularly promotive of health. The human frame is so delicately and wonderfully made, that any excess or violence which may impair the functions of one part, may cause irremediable injury to the whole system.

The air we breathe, though essential to life, becomes vitiated, and prejudicial to health, by respiration, by putrifying vegetable and animal matters, by stagnant waters, and by a state of rest. Hence our dwellings should be located in dry and healthy situations, our apartments should be roomy, kept in a cleanly order, and frequently aired; every species of putrifying substance should be removed from our house yards and cellars, and the latter kept dry, by drains, if necessary, and often ventillated.

The offices of the skin are all important to health. Lavossier has shown, that upon the lowest estimate, the skin is endowed with the important charge of removing from the system, by the process of insensible perspiration, about twenty ounces of waste matter in twenty-four hours, while the max-

imum has been found to amount to five pounds in a day. These excretions are greater in amount, Dr. Combe adds, than the united excretions of the bowels and kidneys. These facts admonish us, that if the functions of the skin are suspended, by a disregard to cleanliness, by too great indulgence in sedentary habits, by exposure to sudden transitions of temperature, or other causes, and the impurities which are ordinarily thrown off by this channel are suffered to remain and accumulate in the system, health must be impaired, and life endangered. So important is a clean skin considered in the economy of health, that frequent ablutions have been enjoined as a religious duty among many eastern nations. A like attention, among us, to keep in wholesome exercise the important functions of the skin, cannot fail of being highly conducive to health.

Vegetation purifies the air, and health, as well as beauty and comfort, are essentially promoted by surrounding our dwellings with fruit and shade trees, and ornamental plants. The splendid elm, which stands on yonder common, is alike the ornament and pride of the town. What a lesson of instruction does this afford! Every man may plant an elm and a maple—an apple tree and a vine—a lilac and a rose bush, in a leisure hour, and may live to enjoy their shade, their fruit, and their fragrance; or should Providence otherwise ordain, may leave them as a grateful inheritance to his posterity. Our fathers planted for us, and we should requite the obligation, by planting for our children.

Most of the diseases which afflict our species, may be traced to impure air, obstructed perspiration, or intemperate indulgences.—*Ib.*

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The Garden.

Another source of high, but rational gratification to the farmer is the garden. This may be made to administer largely to the variety of his viands, the subsistence and health of his family, and the recreation and improvement of the mind, without materially abstracting from the labors of the farm. So strong is my conviction of the economy and salutary influence of a well cultivated garden, that, when I chance to see one in traveling abroad, I involuntarily ascribe to its occupants, economy, good taste and domestic enjoyment.—*Ib.*

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Reading.

The best preventive of gossip and tale bearing, the common recreation of the idle and the ignorant, and the bane of those good feelings and kind offices which sweeten and augment the pleasures of good neighborhood, is to inculcate, in early life, a taste for useful reading. Books remind us of our duties, instruct us in our business, and afford useful employment and recreation for the mind in hours of rest or of leisure; and when the habit of reading is once acquired, its pleasures and advantages become more and more perceptible and enticing, as we advance in useful knowledge. Those who employ their time in their own business, seldom find leisure or disposition officiously to intermeddle in the private concerns of their neighbors. But the mind is as liable to disease as the body, and a diseased mind is far more prejudicial to character and usefulness, than a sickly body. Evil communications corrupt good manners; and bad books, or useless books, are as injurious to the mind and manners, as bad companions are, or as impure air, or obstructed perspiration are to the body. The adage teaches, that a man is known by the company he keeps, and the maxim is true, applied to books as well as men. —*Ib.*

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Book Farming.

Allow me to make a further digression, to speak of a means of improving our husbandry, which is too much neglected, and too often contemned and ridiculed. I allude to what is sometimes, in derision, termed *Book Farming*, but which in reality offers the most substantial facilities to improvement, and the acquisition of wealth. Let us inquire what this book farming is.

A German, by means of study and observation, aided by a long course of practical experience in husbandry, has been able to ascertain the degree of exhaustion in fertility, which soils ordinarily undergo, from the growth of common grain crops—and how much their fertility is increased by given quantities of manure, and by pasture—thus teaching how to maintain, or to increase, the fertility of the soil, and consequently its products and its profits, from the resources of the farm.

Other men have been assiduously engaged for years in studying, and have satisfactorily ascertained the laws by which heat, air and water, are made to exert their best agency in preparing the food, and accelerating the growth and maturity of plants—and have published directions how to derive the highest advantage from these primary agents of nutrition.

And others have invented new and improved implements and machinery, calculated to relieve agricultural labor of half its toils.

A farmer in Ohio raised fifteen hundred bushels of Swedish turneps on an acre of ground, enough to feed and fatten ten bullocks seventy-five days. A farmer in Massachusetts, by a new way of managing his corn crop, has realized a nett profit of $150, on little more than an acre of land, while his neighbors, in the same season, and in adjoining fields, have not been remunerated, in their crop, for the expense of culture. A farmer in New York has proved by experiment, that by a new process of making hay, he can save ten per cent. in weight, something in labor, and other ten per cent. in the quality of his forage. Another farmer of my acquaintance, has cultivated twenty acres of Indian corn, and eight acres of beans, the present season; —the former estimated to average forty bushels the acre, and the latter giving more than an ordinary yield—without employing a plough, or a hand hoe, in the planting or culture—the whole work having been performed with the drill barrow and cultivator, implements of modern introduction, thus economizing from one-half to two-thirds of the labor ordinarily bestowed.

These are all matters of recent record, but as they happen to be *printed*, they very properly fall under the denomination of *Book Farming*. But are they, on this account, less true, or is the information they contain less useful in your practice? If a neighbor makes a valuable improvement, by which he doubles the value of his labor, you readily avail yourselves of his discovery, though you do it by stealth. Through the means of agricultural publications, the entire farming community stand in the relation to you of neighbors—you become acquainted with all their improvements, and are enabled to profit by their skill and science. I might detain you for hours with details of improvements in husbandry, which are essential and accessible to the farmer. Hundreds of men of profound science, and thousands of the best practical farmers, in this and other countries, are engaged in improving agriculture—in making two, three and four blades of grass, and two, three and four bushels of grain grow, where but one blade, or one bushel, grew before; and they are tendering you the benefits of their labors in the agricultural works of the day. The accumulated experience, and the improvements of centuries, have been registered by the press, and their benefits are tendered to all who will read and profit by them, almost without money and without price. He that will read, may learn.—*Ib.*

Working Butter.

Much of the butter brought into market resembles lumps of lard, having a similar consistency, and when cut presents a greasy appearance, clinging like lard to the knife. Besides the absolute difference in quality between such butter and that made by our best dairy ladies, the associations which it frequently forces upon the mind render it of no little importance that butter *look* good, that a disrelish in advance may not unfit the organs of taste for properly relishing what virtue it may in reality possess.

A lady of my acquaintance, who is somewhat noted for making a superior article of butter during all the seasons of the year, attributes the principal cause of this quality of butter to the manner of working it. She says that the practice is very general among those who do, without knowing why, as they have seen others do, to work their butter but a little, and put it away a few hours, or a day, and then work it over again, and perhaps work it the third time, thinking that such a procedure is necessary to get out all the buttermilk, and render the butter better, and make it keep better.

This, according to her views, is exactly the reverse of what ought to be done.

Butter, she says, should never be worked but once; for *all* the buttermilk can be got out at one working, as well as at two or three different times. The reason that she gives for working it but once, is, that if worked even but partially, and then put away, it assumes that firm, granulous consistency that distinguishes good butter from poor; and that if it be again worked, the grain will be destroyed, and it can never afterwards be made to reassume its former appearance; that the more times it is worked, the more will it deteriorate in quality, in firmness, and in flavor. She compares butter that has been several times worked over, to putty, giving before the knife, and, instead of breaking off abruptly, *tearing* from the main lump; and that which is thoroughly worked at first, and worked but once, to a cold boiled potatoe, which instead of giving before the knife, permits the knife to pass through it, without suffering any indentation, and breaks off brittle.

As good butter is no small desideratum, both to the buyer and seller; to the former for use, and to the latter for the credit of her dairy and the benefit of a ready sale and high price, any facts, suggestions, or communications upon the subject, will ever receive due attention, and find a place in the Plough-Boy.—*Buckeye Plough-Boy.*

The Rohan Potatoe.

THE subscriber has a quantity of Rohan Potatoe for sale. They were raised by him from seed obtained from France, and he believes them to be the most productive potatoe known, and a superior variety for the table. Letters (post paid) addressed to the subscriber at Cattskill, N. Y., will be promptly attended to, and the potatoes reserved for those who order till the spring, if they cannot be sent before.

Cattskill, Nov. 15, 1837 -f4t* JOHN A. THOMPSON.

Seeds for 1838.

JUST arrived at the Rochester Seed Store, a large importation of English Field and Garden Seeds, of the growth of 1837; shipped from London this fall expressly to our order, and comprising a full assortment of the choicest kinds, such as

Cabbage,	Ruta Baga,	Rye Grass,
Cauliflower,	Mangel Wurtzel,	White Dutch
Brocoli,	Sugar Beet,	Clover,
Radish,	Lucern,	&c., &c.
Turnep,	Trefoil,	

These Seeds are from one of the best establishments in Europe, and the perfect satisfaction which they have hitherto given, is sufficient guarantee of their character.

Dealers and others supplied at wholesale on very favorable terms. REYNOLDS & BATEHAM.

nov18 fft

Farmer's School Books.

THE Farmer's School Book, edited by J. O. Taylor, published at the Albany School Book Depository. First Lessons on Political Economy, for the use of Schools, by John McVicker, published at the Albany School Book Depository.

The above valuable books are for sale at the Albany prices by HOYT & PORTER.

Rochester, Nov. 11, 1837.-f3t

Fruit Trees For Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.

apr 15-tf

N. B. CASH will be paid for a few thousand two years old APPLE TREES

Monroe Horticultural Garden & Nurseries, GREECE, MONROE CO., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.

From Silliman's Journal.

On Spontaneous Combustion.

BY JAMES MEASE, M. D.

In my "Archives of Useful Knowledge," vol. iii, p. 167, I recorded three cases of the spontaneous combustion of large masses of bituminous coal from Virginia, two in cellars, and a third under a close arch, all of which occurred in Philadelphia.* A fourth case was stated of one thousand two hundred chaldrons of coal "in a close compact magazine" in Paris, and a fifth of one thousand six hundred tons of the same article in the royal ship-yard in Copenhagen and all consumed, together with one thousand four hundred houses. This happen in the year 1794.†

Bituminous coal has on other occasions taken fire. In the year 1822, October and November, three cases occurred of this in the navy yards of Brooklyn, New-York, Portsmouth, New-Hampshire, and Washington city. The coal was from Virginia, and lay exposed to the air and rain.

In the year 1828, one hundred chaldrons of coal which had been placed several weeks before on wet ground in Boston, took fire, with a volume of sulphurous matter rising in a state of ebullition. It was remarked that this was the third instance of the kind within the past year in that city.

Another case was mentioned in the newspapers as having taken place in Ridgley's coal-yard, Baltimore, some years since in the month of August. This coal also was doubtless from Virginia. A similar accident has recently occurred in the coal yard of Nutter & Co., New-York, to sixty tons of Virginia coal. (July, 1837.)

Mr. Dupont, the late extensive manufacturer of gunpowder, informed Dr. Seybert, that charcoal was also liable to spontaneous combustion when in powder and piled in a heap. He had suffered loss from this cause, and a similar accident had occurred near Paris.

The French commissioners, charged by the French government to examine into the causes of the explosions of powder factories, ascertained that charcoal in the lump, by attrition took fire. Charcoal inflames according to M. Caussigni, by the pressure of millstones, and has taken fire in the box of the bolter, into which it had been sifted; the coarse powder experienced no alteration.—*Annales de Chimie, No.* 35.

Mr. Sage saw the roof of one of the low wings of the mint at Paris set on fire by the spontaneous combustion of a large quantity of charcoal that had lain in the garrets.

Two instances of spontaneous combustion took place in the powder manufactory of Essone, in the years eight and ten of the French republic; the first in the box for sifting the charcoal, and the second in the charcoal repository. Bartholdi attributes them to phosphorus in the charcoal.

May not one or more of the conflagrations of powder mills, which have taken place during the two past years, have been caused in this way?

Linen, cotton, and woolen cloth, or the raw materials of these fabrics impregnated with flax seed oil, or paint, or varnish, have frequently proved the causes of spontaneous inflammation.

Several years since a piece of canvass, forty yards in length, painted with white lead and oil, and exposed to the sun for some hours, was rolled up and put under cover. The next morning it was found smoking, and the whole except a yard, burnt to cinder, with a hole through the bottom of a wagon. This happened at Mount Pleasant, Virginia. A large piece of coarse muslin, thoroughly oiled for the purpose of making covers for boxes, was left over night, folded loosely in a shed in a yard in Market street, Boston; in the morning, it was found burnt entirely through, and about to blaze. (1831.)

A quantity of wool prepared with the usual proportion of oil for carding, and thrown into a heap in the evening, was found the next morning ignited, and the floor to a considerable extent on fire. This happened in Hamlin & Bates' factory; and another instance occurred at the establishment of Warner & Whetton.* Lamp oil was used. (1831.) A quantity of cotton clothing for seamen's suits, had to dry, and were then taken down, rolled together, and placed in a shed; the next day they were found on fire. (1831.)

The schooner Hiram, laden with wool, when on a voyage from Bilboa to New-York, in March, 1825, was set on fire, in consequence of some linseed oil having been spilt on the cabin floor.

Two pounds of flax seed oil, near Germantown, Pennsylvania, set fire to the building next morning. (1818.) The closet in which the paint and oil were kept at Boshor's carriage factory, Richmond, Virginia, having been smeared with linseed oil, burst out in a flame. (1832.)

Some cotton used in cleaning the cabin of the ship Birmingham, became partially filled with flax seed oil, and after some time it ignited. An express experiment proved that cotton thus impregnated would inflame in two hours. (New-York, 1831.)

Cotton rags, while delivering from the cellar of a store, 24 Broad street, New-York, were found on fire. Oil had been spilt on them. (June, 1834.)

Mr. Durant's large balloon, varnished for the first time, exposed to the sun during the day, and rolled up in the evening, and diposited upon chairs in a house in Jersey City, was found the next morning entirely consumed. The varnish was composed of oil, turpentine and caoutchouc. (June, 1832.)

Mr. Atkinson of Ellicott's mills near Baltimore, stated that flax seed oil spilt on [wood] ashes in an iron kettle, caused the ashes to inflame in twenty-four hours. He made an experiment to test the fact, with success. Mr. Patterson, President of the United States' Mint, repeated the experiment with cold hickory ashes, and one pint of flax seed oil; in forty-six hours after, the mixture was fairly ignited, and in a short time emitted flame, which continued upwards of an hour. After the flame had ceased, the ignition continued for eighteen hours, and the ashes were then poured out of the vessel. (1820.)

A canvass recently painted with flax seed oil, and then dried and rolled close, took fire after being three hours exposed to the sun on the deck of the schooner Olive, at Troy, New-York. (August, 1820.)

A piece of old packing sheet, which had lain long about an oil and color warehouse, and was besmeared with different kinds of vegetable oils, on being thrown behind some casks pretty much confined from the air, inflamed.—*Edinburgh Phil. Jour.*, vol. vii. p. 219.

A cask of oat meal left from May to August in a kitchen in Glasgow, caught fire and was totally consumed together with the barrel.—*Thomson's Annals*, vol. xvi. p. 390.

A parcel of hops well dried, were put into a home-spun cotton gown and placed on a heap of cotton seed; after three months they inflamed. Cotton it was remarked has frequently been known to take fire spontaneously in a moist and heated atmosphere.—*Milton, N. Carolina paper.* (1824.)

Certain ochres ground in flax seed oil, inflamed during the act of trituration.

Alder charcoal has taken fire in the ware houses in which it was stored.† One of sixty-three casks of lampblack on board the ship Catherine, bound to India from England, ignited, but was discovered by the fumes before it had burst into a flame.—*Old Monthly Mag. Lon.*, 1827, p. 91.

Wet Cotton.—The ship Earl of Eldon, in August, 1834, was set on fire, by reason of having shipped cotton in the rain at Bombay.

A similar occurrence took place in 1836, on board a vessel which had taken in cotton at Apalachicola, Florida, during rain.

A piece of red cedar about two ounces in weight, broken in two, and laid upon the shelf of the store of Mr. Adam Reigart in Lancaster, Penn. inflamed after two years had elapsed, in June, 1834. It was part of a tree found in excavating the deep cut of the rail road, at the "Gap in the Mine Ridge," Lancaster county, thirty feet below the surface. The combustion was proceeding so rapidly, that the shelf would have been in a few minutes on fire, and it evidently commenced in the interior of the wood, as some of the outer fibers were sound.—*Hazard's Register of Pennsylvania*, vol. xiii, p. 399.

Haussman relates that several dozens of skeins of cotton, dyed red, and impregnated with an alkaline solution of alumina, with excess of boilod linseed oil, were placed on a straw bottomed chair, under a window, and at midnight they inflamed.*

A heap of horse manure inflamed in the month of May, 1822, at Sharon in Connecticut. The fire was two feet in circumference.—*American Journal of Science*, vol. v, p. 201.†

WATER POWER.—The discovery of a new application of water power, the results of which promise to be of an important character, has been made by a tradesman of Greenock, and is thus described in the Greenock Advertiser:

Like all truly valuable discoveries, it is distinguished alike for simplicity and efficiency. It consists of a cylinder and piston similar to those employed in a steam engine. To the cylinder there are two entrance and two discharge pipes, one of each on either side of the stuffing box of the piston. The same turn of the cock that admits the water into one part of the cylinder opens the discharge-pipe in the other, and thus a vacuum is formed. To work this, advantage is taken of the pressure of the Shaw's water, the height of the reservoir of which gives it a force of 60 lbs. to the inch in the lower parts of the town. A short time ago we witnessed an experiment with a cylinder two inches in diameter, worked with a jet of water somewhat less than a quarter of an inch in diameter, and the piston although loaded with one and a half cwt. rose and fell 16 times in the minute. In this case the entrance and discharge pipes were equal in size, and the cylinder was placed in a vertical position. Since then the discoverer has had another model made with the cylinder laid horizontally, and with the discharge pipe nearly three times as large as the entrance ones, and by this means the motion was increased to twenty-six double strokes in the minute. The cheapness of an apparatus of this kind and its efficiency wherever there is a sufficient height of water to work it, must be obvious to all, while its manageableness and freedom from danger are no less conspicuous. The merit of the discovery is due to Mr. W. Allison a mason of this town, who first suggested this novel application of a well known power to Mr. Baird, engineer, and Mr. A. Fairgrieve, who have materially aided him in reducing it to practice.

One use to which Mr. Allison conceives it to be peculiarly applicable is the hoisting of heavy goods into warehouses. The Shaw's Water Co. for 7*l.* a year, give a supply of water equal to 1000 gallons per day. This water, injected into a cylinder ten inches in diameter, he calculates will raise to the second floor 390 tons per day, to the third floor 200 tons, to the fourth 150, and to the fifth 100 tons. The cost of the water for each day's work is about 5d. The goods in question will be raised 39 feet per minute. These calculations have proceeded upon the pressure on the water introduced into the town for domestic purposes, but a pipe from the Compensation Dam at the Paper Mill, from its superior height, would give a pressure of about 200 lbs. on the inch.

The Baltimore Patriot states that a locomotive engine, built by Mr. Norris of Philadelphia, made three trips from Baltimore to Washington and back, with passenger cars attached, making a distance travelled within the day of of 230 miles.

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* This last was from Dr. Seybert's paper on Spontaneous Combustion, in New-York Medical Repository, Hexade 3d, vol. iii. Two similar facts are given by Bartholdi, *Annales de Chimie*, No. 144: and translated in Tilloch's Philos. Mag. vol. xviii.

† In my additions to the article "Inflammation," in Wilkin's Domestic Encyc., I have given nine cases of spontaneous combustion from various causes.

* Both at Plainfield, Massachusetts. Ample experience has taught European manufacturers that no oil should be used for greasing wool, but that of rape seed.

† B. G. Sage. Walker's Archives, vol. iii, p. 80.

* His theory of this is as follows: "In all cases where the oxygen of the atmosphere is rapidly attracted and absorbed, the caloric, which serves as a base to the oxygen, giving it the qualities of gas, or elastic properties, is disengaged in such abundance, that if the absorbing bodies are susceptible of taking fire, or if combustible bodies are in the neighborhood, a spontaneous inflammation will take place."—*Annales de Chimie, No.* 144. *Tilloch, Vol.* 18.

† It appeared subsequently, that this case of supposed spontantaneous combustion was the work of an incendiary; the communication of both facts was from the same person, a respectable physician.—*Editor.*